

## Complete Summary

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### GUIDELINE TITLE

Nutrition assessment - pediatrics.

### BIBLIOGRAPHIC SOURCE(S)

Nutrition assessment - pediatrics. JPEN J Parenter Enteral Nutr 2002 Jan-Feb; 26(1 Suppl): 13SA-17SA. [44 references]

## COMPLETE SUMMARY CONTENT

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INSTITUTE OF MEDICINE (IOM) NATIONAL HEALTHCARE QUALITY REPORT

### CATEGORIES

IDENTIFYING INFORMATION AND AVAILABILITY

## SCOPE

### DISEASE/CONDITION(S)

Pediatric malnutrition

### GUIDELINE CATEGORY

Evaluation

Prevention

Screening

### CLINICAL SPECIALTY

Family Practice

Gastroenterology

Internal Medicine

Nutrition

Pediatrics

### INTENDED USERS

Advanced Practice Nurses  
Allied Health Personnel  
Dietitians  
Hospitals  
Nurses  
Physician Assistants  
Physicians

#### GUIDELINE OBJECTIVE(S)

- To revise the 1993 American Society for Parenteral and Enteral Nutrition Clinical Guidelines so that:
  - The Guidelines are factually up-to-date to reflect current, evidence-based, best approach to the practice of nutrition support
  - The Guidelines support the clinical and professional activities of nutrition support practitioners by articulating evidence-based recommendations upon which to base personal and institutional practices and resource allocation
  - The Guidelines serve as tools to help guide policy makers, health care organizations, insurers, and nutrition support professionals to improve the systems and regulations under which specialized nutrition support is administered
- To assist clinical practitioners who provide specialized nutrition support to patients in all care settings

#### TARGET POPULATION

Pediatric patients in ambulatory, hospital, home, or alternate site care settings

#### INTERVENTIONS AND PRACTICES CONSIDERED

##### Prevention

1. Prevention and detection strategies
2. Family-centered approach

##### Screening

1. Nutrition screening to include:
  - Height
  - Weight
  - Weight change
  - Primary diagnosis
  - Presence of co-morbidities
2. Periodic re-screening

##### Evaluation

1. Patient specific nutrition assessment, including:
  - Evaluation of medical course
  - Medication history

- Nutritional history
  - Seeding skill level
  - Analysis of typical and current diet
  - Physical examination
  - Anthropomorphic measurements
  - Laboratory data
2. Written summary provided to patient's care providers listing:
    - Nutrition risk stratification
    - Protein, calorie, and micronutrient requirements
    - Route of administration
    - Treatment goals and monitoring parameters
  3. Nutrition care plan
    - Short-term and long-term objectives
    - Monitoring plan

#### MAJOR OUTCOMES CONSIDERED

Not stated

### METHODOLOGY

#### METHODS USED TO COLLECT/SELECT EVIDENCE

Searches of Electronic Databases

#### DESCRIPTION OF METHODS USED TO COLLECT/SELECT THE EVIDENCE

Not stated

#### NUMBER OF SOURCE DOCUMENTS

Not stated

#### METHODS USED TO ASSESS THE QUALITY AND STRENGTH OF THE EVIDENCE

Weighting According to a Rating Scheme (Scheme Given)

#### RATING SCHEME FOR THE STRENGTH OF THE EVIDENCE

A modified version of the method used by the Agency for Healthcare Research and Quality (AHRQ), US Department of Health and Human Services was used:

- A. There is good research-based evidence to support the guideline (prospective, randomized trials).
- B. There is fair research-based evidence to support the guideline (well-designed studies without randomization).
- C. The guideline is based on expert opinion and editorial consensus.

#### METHODS USED TO ANALYZE THE EVIDENCE

## Systematic Review

### DESCRIPTION OF THE METHODS USED TO ANALYZE THE EVIDENCE

Not stated

### METHODS USED TO FORMULATE THE RECOMMENDATIONS

Expert Consensus

### DESCRIPTION OF METHODS USED TO FORMULATE THE RECOMMENDATIONS

Experts selected for their detailed knowledge and experience in a chosen niche reviewed the primary literature, synthesized and summarized it, and formulated the guideline statements.

In situations where evidence-based recommendations could not be made because of a lack of relevant clinical studies, recommendations are classified as being based on class C data (see the "Rating Scheme for the Strength of Evidence" field) and reflect an attempt to make the best recommendations possible within the context of the available data and expert clinical experience.

### Issues Considered During Recommendation Formulation

- A thread running throughout many of the disease-specific guidelines is the rationale for choosing enteral over parenteral specialized nutrition support (SNS) or alternatively parenteral over enteral when a decision to use SNS has been made.
- Another fundamental issue that influenced many of the discussions and recommendations is the relationship between nutrition assessment, nutrition status, malnutrition, and severity of disease.

Refer to the companion document: Guidelines for the use of parenteral and enteral nutrition in adult and pediatric patients. Section I: Introduction. JPEN J Parenter Enteral Nutr 2002 Jan-Feb; 26(1 Suppl): 1SA-6SA.

There has been little research on pediatric nutrition screening upon which to make evidence based practice recommendations. There is only one study that validates a nutrition screening method for pediatric patients. Clinicians therefore have based their practice upon guidelines described by the Joint Commission for Accreditation of Healthcare Organizations (JCAHO).

### RATING SCHEME FOR THE STRENGTH OF THE RECOMMENDATIONS

Not applicable

### COST ANALYSIS

A formal cost analysis was not performed and published cost analyses were not reviewed.

## METHOD OF GUIDELINE VALIDATION

External Peer Review  
Internal Peer Review

## DESCRIPTION OF METHOD OF GUIDELINE VALIDATION

Completed drafts were reviewed by the section editors (the members of the Clinical Guidelines Task Force [CGTF]), edited and/or rewritten, and then reviewed twice by the members of the CGTF as a group. The entire document was then reedited by the CGTF Chair. This four-times–edited draft was submitted to the American Society for Parenteral and Enteral Nutrition (A.S.P.E.N.) Board of Directors and more than 180 experts in the field of nutrition support including experts and organizations outside of A.S.P.E.N.) for content, format, and style review. These reviewers were also specifically asked to check each guideline statement for appropriateness, accuracy, and strength of evidence. This review phase stimulated a final cycle of editing by the CGTF and the CGTF Chair. The final document was then approved by the A.S.P.E.N. Board of Directors and submitted to the Journal of Parenteral and Enteral Nutrition for publication.

## RECOMMENDATIONS

### MAJOR RECOMMENDATIONS

The strength of the evidence supporting each guideline statement is coded A, B, or C. Definitions of these classifications is provided at the end of the "Major Recommendations" field.

#### Malnutrition and Its Consequences

1. Prevention and early detection of malnutrition in children throughout the developmental cycle should be integrated into all health care encounters. (B)
2. Prevention and detection strategies should be adapted to the clinical setting and the needs of the pediatric patient. (C)
3. A family centered approach should be used for prevention and early detection of malnutrition to address all the factors that may have an impact on the adequate delivery of nutrients to the child. (C)

#### Nutrition Screening - Pediatrics

1. A nutrition screen, incorporating objective data such as height, weight, weight change, primary diagnosis, and presence of comorbidities should be a component of the initial evaluation of all pediatric patients in ambulatory, hospital, home, or alternate site care settings. (C)
2. The health care organization should determine the data elements to be included in the screening tool and who will perform the screen. (C)
3. A procedure for periodic nutrition rescreening should be established. (C)

#### Nutrition Assessment - Pediatrics

1. A formal nutrition assessment should be carried out in any pediatric patient, independent of the care setting, who is identified by a nutrition screen as nutritionally at risk. (C)
2. The nutrition assessment should be patient specific and include evaluation of the medical course, medication history, nutritional history, feeding skill level, analysis of typical and current diet, physical examination, anthropomorphic measurements, and laboratory data. (C)
3. A written summary of the objective and subjective data collected for the nutrition assessment, of the explicit nutrition risk stratification, and of the specific recommendations to be incorporated into the nutrition care plan (protein, calorie, and micronutrient requirements, route of administration, and treatment goals and monitoring parameters) should be created and made available to the patient's care providers. (C)
4. Nutrition goals should be developed as a part of the nutrition care plan. (C)
5. The frequency of nutrition monitoring and reassessment should be based on the patient's clinical course and upon an objective nutrition acuity rating. (C)

#### Creation of a Nutrition Care Plan - Pediatrics

1. Nutrition goals should include short-term and long-term objectives. (C)
2. A plan for monitoring the effect of nutrition interventions should be stated in the nutrition care plan. (C)

#### Definitions:

#### Rating Scheme

- A. There is good research-based evidence to support the guideline (prospective, randomized trials).
- B. There is fair research-based evidence to support the guideline (well-designed studies without randomization).
- C. The guideline is based on expert opinion and editorial consensus.

#### CLINICAL ALGORITHM(S)

Clinical algorithms of the Nutrition Care Process and Route of Administration of Specialized Nutrition Support are provided in the companion document: Nutrition care process. Section II: Nutrition Care Process. JPEN J Parenter Enteral Nutr 2002 Jan-Feb;26(1 Suppl): 7SA-8SA.

### EVIDENCE SUPPORTING THE RECOMMENDATIONS

#### TYPE OF EVIDENCE SUPPORTING THE RECOMMENDATIONS

The type of evidence supporting the recommendations is not explicitly stated.

### BENEFITS/HARMS OF IMPLEMENTING THE GUIDELINE RECOMMENDATIONS

#### POTENTIAL BENEFITS

## Nutrition Screening

Nutrition screening is the first step in the nutrition care process: It allows identification of high risk individuals so that nutrition services can be provided in a timely manner to those with the greatest need.

## Nutrition Assessment

Nutrition assessment is the second stage of the nutrition care process. Nutrition screening identifies patients who require a comprehensive nutrition assessment. The nutrition assessment describes the current nutrition status of the infant, child, or adolescent and facilitates the development of a nutrition care plan.

## Nutrition Plan

The nutrition care plan serves as a template for nutrition therapy and should be integrated into the medical and surgical treatment care plans. The nutrition care plan should address all supplemental nutrients and oral, enteral, and parenteral nutrition modalities. It is developed to correct nutritional problems or reduce nutritional risks identified by the formal nutrition assessment. It also serves as an outline of sequential, reasonable, and achievable interventions and counseling for the infant, child, or adolescent within a given setting. A nutrition care plan is dynamic because of the changes in clinical status and shifting needs of growth and development that characterize pediatric patients.

## POTENTIAL HARMS

Not stated

## QUALIFYING STATEMENTS

### QUALIFYING STATEMENTS

- These American Society for Parenteral and Enteral Nutrition (A.S.P.E.N.) Clinical Guidelines are general statements. They are based upon general conclusions of health professionals who, in developing such guidelines, have balanced potential benefits to be derived from a particular mode of medical therapy against certain risks inherent with such therapy. However, the professional judgment of the attending health professional is the primary component of quality medical care. The underlying judgment regarding the propriety of any specific procedure must be made by the attending health professional in light of all of the circumstances presented by the individual patient and the needs and resources particular to the locality. These guidelines are not a substitute for the exercise of such judgment by the health professional, but rather are a tool to be used by the health professional in the exercise of such judgment. These guidelines are voluntary and should not be deemed inclusive of all proper methods of care, or exclusive of methods of care reasonably directed toward obtaining the same results.
- Although these pediatric regulations (Joint Commission Accreditation of Healthcare Organizations (JCAHO) standards) have been implemented by most hospitals in order to comply with the JCAHO standards, no evidence-

- based literature exists to support these standards, nor has it been shown that assessment within 24 hours of admission actually has an impact on the outcome of adult or pediatric hospitalized patients.
- Data are not available concerning the reliability and reproducibility of nutrition screening performed by staff nurses.
  - Despite worldwide attention on growth monitoring, there were only two studies available for review, both from developing countries. No conclusions can be drawn.

## IMPLEMENTATION OF THE GUIDELINE

### DESCRIPTION OF IMPLEMENTATION STRATEGY

An implementation strategy was not provided.

## INSTITUTE OF MEDICINE (IOM) NATIONAL HEALTHCARE QUALITY REPORT CATEGORIES

### IOM CARE NEED

Staying Healthy

### IOM DOMAIN

Effectiveness  
Patient-centeredness

## IDENTIFYING INFORMATION AND AVAILABILITY

### BIBLIOGRAPHIC SOURCE(S)

Nutrition assessment - pediatrics. JPEN J Parenter Enteral Nutr 2002 Jan-Feb; 26(1 Suppl): 13SA-17SA. [44 references]

### ADAPTATION

Not applicable: The guideline was not adapted from another source.

### DATE RELEASED

2002 Jan-Feb

### GUIDELINE DEVELOPER(S)

American Society for Parenteral and Enteral Nutrition - Professional Association

### SOURCE(S) OF FUNDING

Not stated



## GUIDELINE COMMITTEE

Clinical Guidelines Task Force

## COMPOSITION OF GROUP THAT AUTHORED THE GUIDELINE

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## FINANCIAL DISCLOSURES/CONFLICTS OF INTEREST

Not stated

## GUIDELINE STATUS

This is the current release of the guideline.

## GUIDELINE AVAILABILITY

Electronic copies: Not available at this time.

Print copies: Available from the American Society for Parenteral and Enteral Nutrition (ASPEN), 8630 Fenton St, Suite 412, Silver Spring, MD 20910-3805; (800) 741-8972. For details, please see the [ASPEN Web site](#).

## AVAILABILITY OF COMPANION DOCUMENTS

The following are available:

- Guidelines for the use of parenteral and enteral nutrition in adult and pediatric patients. JPEN J Parenter Enteral Nutr 2002 Jan-Feb;26(1 Suppl): 1SA-6SA.
- Nutrition care process. JPEN J Parenter Enteral Nutr 2002 Jan-Feb;26(1 Suppl): 7SA-8SA.

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## PATIENT RESOURCES

None available

## NGC STATUS

This summary was completed by ECRI on May 5, 2004.

## COPYRIGHT STATEMENT

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